



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,171	10/19/2005	Timothy John Finnigan	687-135	2652
23117 7590 01/29/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
DEES, NIKKI H				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
01/20/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,171

Applicant(s)

FINNIGAN ET AL.

Examiner

Nikki H. Dees

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 9-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment filed October 13, 2009, has been entered. Claims 1-5, 7, and 9-21 are currently pending in the Application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar (4,178,394) in view of Nigam (Nigam, P. 2000. "Mycelial Fungi." Encyclopedia of Food Microbiology. Vols. 1-3. Robinson et al., Eds. Academic Press. pp. 2034-2044).
4. Regarding claims 1, 5, 7, 9-11, 14, 15, 18, and 21, Kumar teaches a sausage analog product comprising wheat gluten, fibrous material, and other ingredients including flavorings and colorings (Abstract). The wheat gluten is combined with water to increase the viscosity of the mixture and form a dough to provide texture to the mixture (col. 3 lines 11-16). The ratio of gluten to water in the composition is in the range required by claim 15, based on the amounts reported in Example 2.

5. Regarding claims 19 and 20, Kumar teaches a variety of ingredients including fat and egg albumin (ovoprotein) for use in his invention (Example 2). The product may be steam cooked (Example 3). Overall ranges for ingredients that may be used in the invention are taught at col. 3 lines 46-60. The slight differences in amounts of fats are considered to be obvious matters of choice based on the taste/texture desired in the final product. One of ordinary skill would have been able to alter the amount of fat for use in the invention through no more than routine experimentation.
6. Kumar is silent as to the edible protein fiber (filamentous material) being a fungal protein. Kumar is also silent as to the ratio of the fibrous material to the gluten and to the presence of onions in the invention.
7. Regarding claims 2-4, Nigam teaches filamentous fungus as a fungal protein (mycoprotein) in the form of fungal mycelia (p. 2035). The filament length ranges from 400 to 700 μm and diameter of 3-5 μm (p. 2042), resulting in an aspect ratio ranging from about 80 to 233. The filamentous fungus of Nigam is a fibrous protein having a structure similar to animal muscle cells (p. 2042).
8. One of ordinary skill in the art at the time the invention was made wishing to provide an edible protein fiber in the invention of Kumar would have found it obvious to include fungal protein particles as taught by Nigam. The fungal protein of Nigam was not known in the art at the time the invention of Kumar was made. However, at the time of the instant invention one of ordinary skill wishing to replace the textured soy protein taught for use in the invention of Kumar would have found it obvious to use a similarly textured fungal protein in place of the soy protein. This would have provided the

opportunity to have a product free from soy protein, while at the same time maintaining the desirable texture provided by the presence of the protein fibers.

9. Regarding claims 12-15, the invention of Kumar does not report the amount of edible protein fiber for use in the invention. The composition may comprise 4-16% textured protein, and Example 4 replaces part of the textured protein in Example 2 with the protein fiber, indicating that the amount of protein fiber used in the invention would likely fall within the ranges as claimed by Applicant. Further, one of ordinary skill, through no more than routine experimentation, would have been able to determine the appropriate amount of fibrous material for use in the invention to provide the composition with a suitable sausage-like texture.

10. Kumar does not specifically teach onions as flavorings. However, one of ordinary skill in the art at the time the invention was made would have found it obvious to include onions as flavorings in the composition of Kumar. Onions are long known in the art as food flavorings, and their inclusion in a savory product such as the one taught by Kumar would be considered routine to one of ordinary skill.

Response to Arguments

11. Applicant's arguments filed October 13, 2009, have been fully considered but they are not persuasive.

12. Applicant argues that the combination of Kumar not Nigam recognizes the problem of the rapid gellation of gluten, and that the production of the sausage as taught by Kumar is different than the present invention (Remarks, pp. 7-8).

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the method of production) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. Applicant's claims 1, 5, 7, 9-15, and 18-20 are to a composition, not a method of making a composition. Arguments directed to the manner by which the composition is made, and the resultant texture of the composition are not germane to the instant rejection. Further, method claims 16, 17, and 21 require only that the fungal particles and proteinaceous material (i.e. wheat gluten) be contacted in the presence of water. There is no requirement that the materials be combined in a particular sequence or over a specific time period so that a desired texture is produced.

15. Applicant goes on to state that neither Kumar or Nigam recognizes the effects of filamentous fungus on gluten (Remarks, p. 8).

16. In response to applicant's argument that Kumar and Nigam do not recognize the effects of the filamentous fungus on gluten, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior

art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

17. One of ordinary skill in the art at the time the invention was made wishing to provide a product free of soy protein would have been able to arrive at the composition and method as claimed with no more than routine experimentation. The combination of Kumar and Nigam comprises gluten, water, and fibrous material in the form of filamentous fungus, providing a product free of soy protein.

18. Regarding the range of fibrous material for use in the invention (Remarks, p. 9), as stated in the rejection *supra*, one of ordinary skill would have been able to adjust the amount of material to provide the desired texture in the final foodstuff. Applicant's arguments directed to the advantages provided by the claimed ratio are not convincing as the prior art need not have the same motivation for arriving at the same composition.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikki H. Dees whose telephone number is (571) 270-3435. The examiner can normally be reached on Monday-Friday 7:30-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. H. D./
/Lien T Tran/
Primary Examiner, Art Unit 1794

Nikki H. Dees
Examiner
Art Unit 1794

